138961-1

## IN THE SPECIFICATION

Please amend Paragraph [0050] as follows:

[0050] In synthesizing a polythiophene for a specific design temperature, e.g. for the series of poly(3-alkylthiophene)s there is roughly an inverse correlation with the length of the n-alkane substituent and the temperature of the thermochromic transition for both the regionandom ( $R_1$ =alkyl,  $R_4$ =alkyl, n=0.8, m=0.2,  $R_5$ ,  $R_6$ =H) and regionegular ( $R_1$ =alkyl,  $R_5$ ,  $R_6$ =H), poly(3-n-alkylthiophene)s. For regionandom polymers longer substituents such as n-hexadecyl have lower temperature thermochromic transitions (81°C) than shorter chain substituents such as n-octyl (130°C). The regionegular polymers have higher thermochromic transitions than the regionandom polymers but the same inverse correlation with chainlength chain length is observed. The n-hexadecyl and n-octyl have thermochromic transition from about 125 to about 175°C. As long as the number of thiophene units in the polymer is approximately greater than sixteen the thermochromic transition is molecular weight independent. Oligothiophenes (n+m+1<16) have lower temperature thermochromic transitions than the polythiophenes (n+m+1<16).